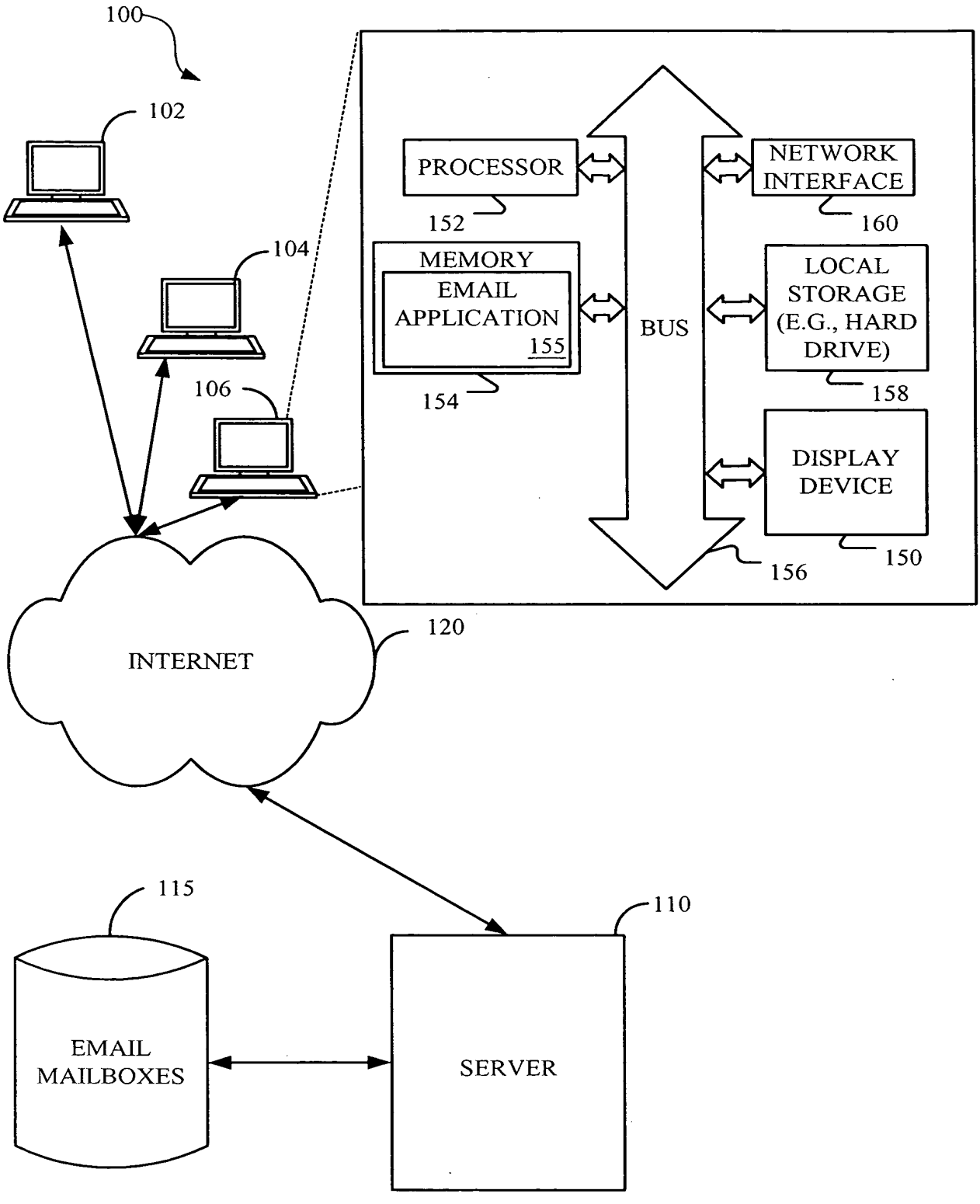
100
102
104
106
PROCESSOR
152
MEMORY
EMAIL APPLICATION
155
154
BUS
NETWORK INTERFACE
160
LOCAL STORAGE (E.G., HARD DRIVE)
158
DISPLAY DEVICE
150
156
INTERNET
120
115
EMAIL MAILBOXES
SERVER
110

FIG. 1

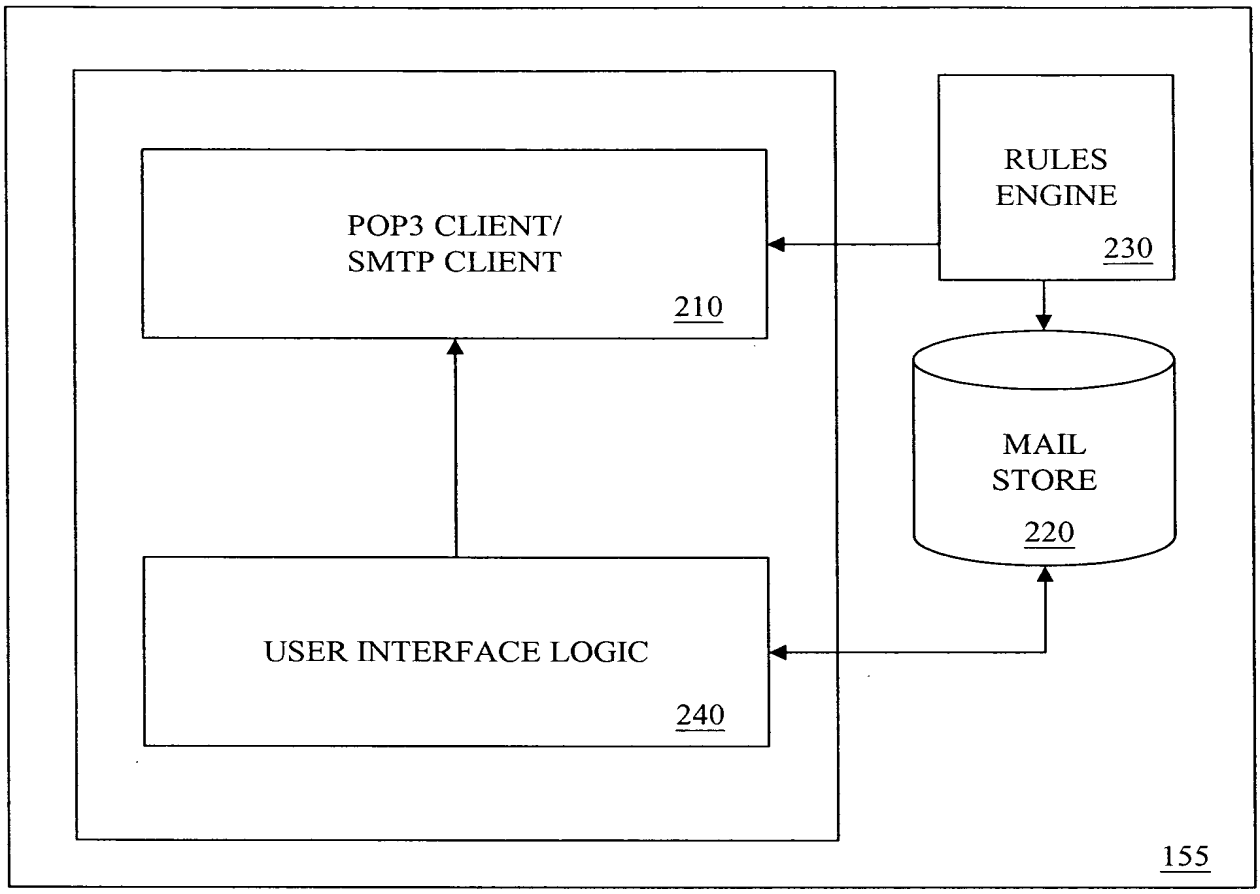
POP3 CLIENT/
SMTP CLIENT
210
RULES
ENGINE
230
MAIL
STORE
220
USER INTERFACE LOGIC
240
155

FIG. 2

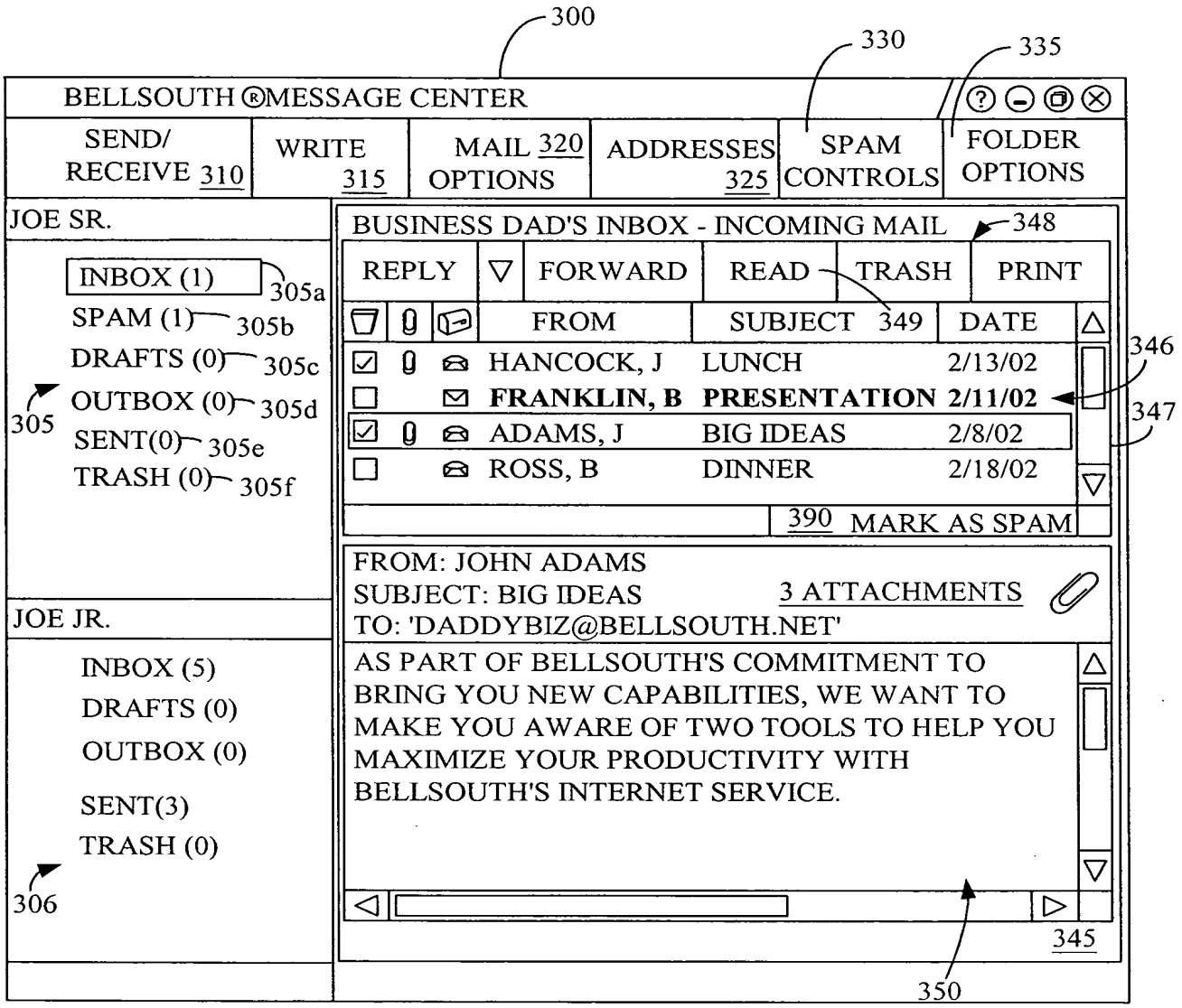
300
330
335
BELLSOUTH ®MESSAGE CENTER
SEND/ RECEIVE 310
WRITE 315
MAIL 320 OPTIONS
ADDRESSES 325
SPAM CONTROLS
FOLDER OPTIONS
JOE SR.
INBOX (1)
305a
SPAM (1)
305b
DRAFTS (0)
305c
OUTBOX (0)
305d
SENT(0)
305e
TRASH (0)
305f
305
JOE JR.
INBOX (5)
DRAFTS (0)
OUTBOX (0)
SENT(3)
TRASH (0)
306
BUSINESS DAD'S INBOX - INCOMING MAIL
348
REPLY
FORWARD
READ
TRASH
PRINT
FROM
SUBJECT 349
DATE
346
HANCOCK, J LUNCH 2/13/02
FRANKLIN, B PRESENTATION 2/11/02
ADAMS, J BIG IDEAS 2/8/02
ROSS, B DINNER 2/18/02
347
390 MARK AS SPAM
FROM: JOHN ADAMS
SUBJECT: BIG IDEAS
3 ATTACHMENTS
TO: 'DADDYBIZ@BELLSOUTH.NET'
AS PART OF BELLSOUTH'S COMMITMENT TO BRING YOU NEW CAPABILITIES, WE WANT TO MAKE YOU AWARE OF TWO TOOLS TO HELP YOU MAXIMIZE YOUR PRODUCTIVITY WITH BELLSOUTH'S INTERNET SERVICE.
345
350

FIG. 3

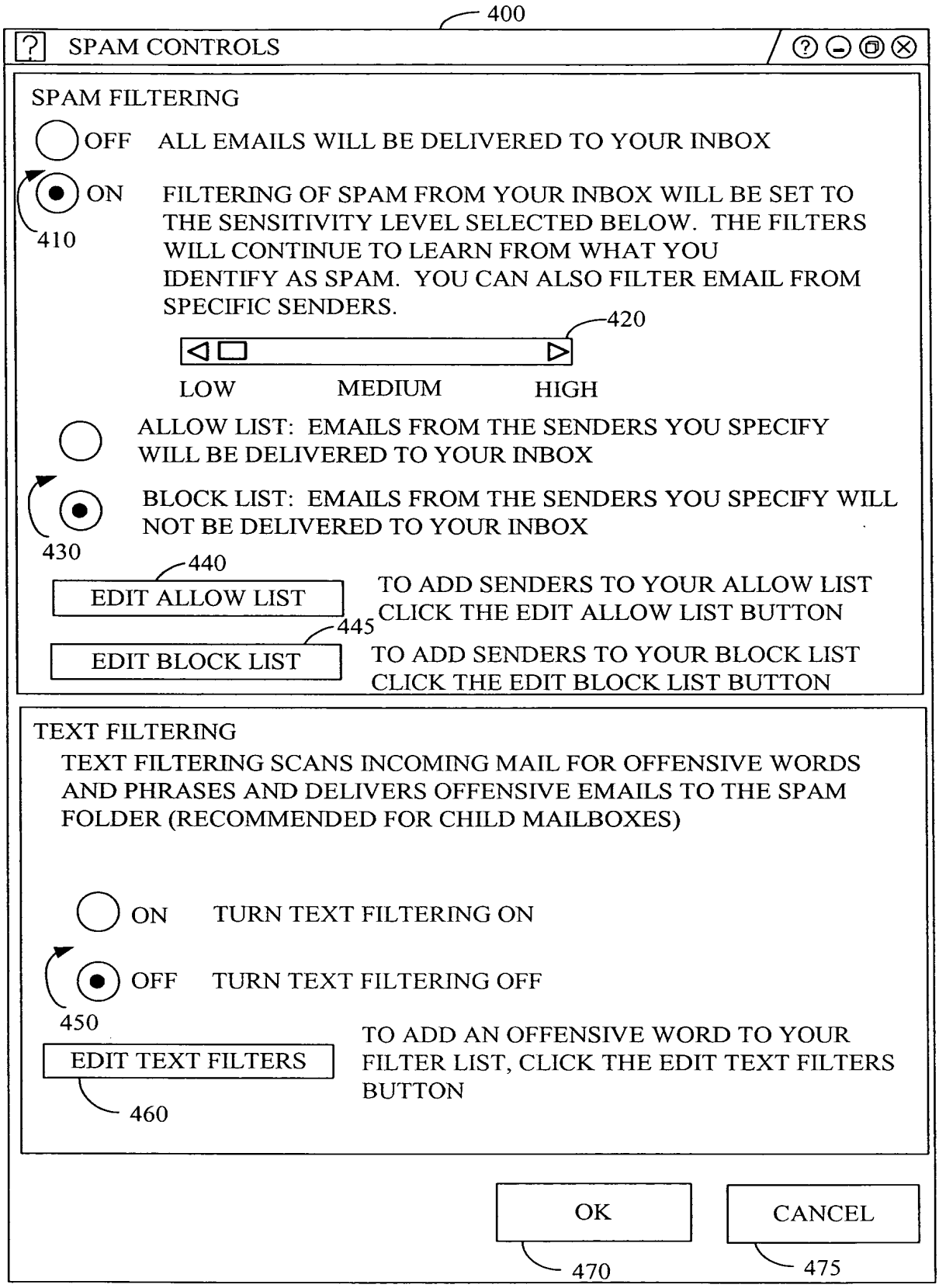
400
SPAM CONTROLS
SPAM FILTERING
OFF
ALL EMAILS WILL BE DELIVERED TO YOUR INBOX
ON
410
FILTERING OF SPAM FROM YOUR INBOX WILL BE SET TO THE SENSITIVITY LEVEL SELECTED BELOW. THE FILTERS WILL CONTINUE TO LEARN FROM WHAT YOU IDENTIFY AS SPAM. YOU CAN ALSO FILTER EMAIL FROM SPECIFIC SENDERS.
420
LOW
MEDIUM
HIGH
ALLOW LIST: EMAILS FROM THE SENDERS YOU SPECIFY WILL BE DELIVERED TO YOUR INBOX
BLOCK LIST: EMAILS FROM THE SENDERS YOU SPECIFY WILL NOT BE DELIVERED TO YOUR INBOX
430
440
EDIT ALLOW LIST
TO ADD SENDERS TO YOUR ALLOW LIST CLICK THE EDIT ALLOW LIST BUTTON
445
EDIT BLOCK LIST
TO ADD SENDERS TO YOUR BLOCK LIST CLICK THE EDIT BLOCK LIST BUTTON
TEXT FILTERING
TEXT FILTERING SCANS INCOMING MAIL FOR OFFENSIVE WORDS AND PHRASES AND DELIVERS OFFENSIVE EMAILS TO THE SPAM FOLDER (RECOMMENDED FOR CHILD MAILBOXES)
ON
TURN TEXT FILTERING ON
OFF
TURN TEXT FILTERING OFF
450
EDIT TEXT FILTERS
TO ADD AN OFFENSIVE WORD TO YOUR FILTER LIST, CLICK THE EDIT TEXT FILTERS BUTTON
460
OK
CANCEL
470
475

FIG. 4

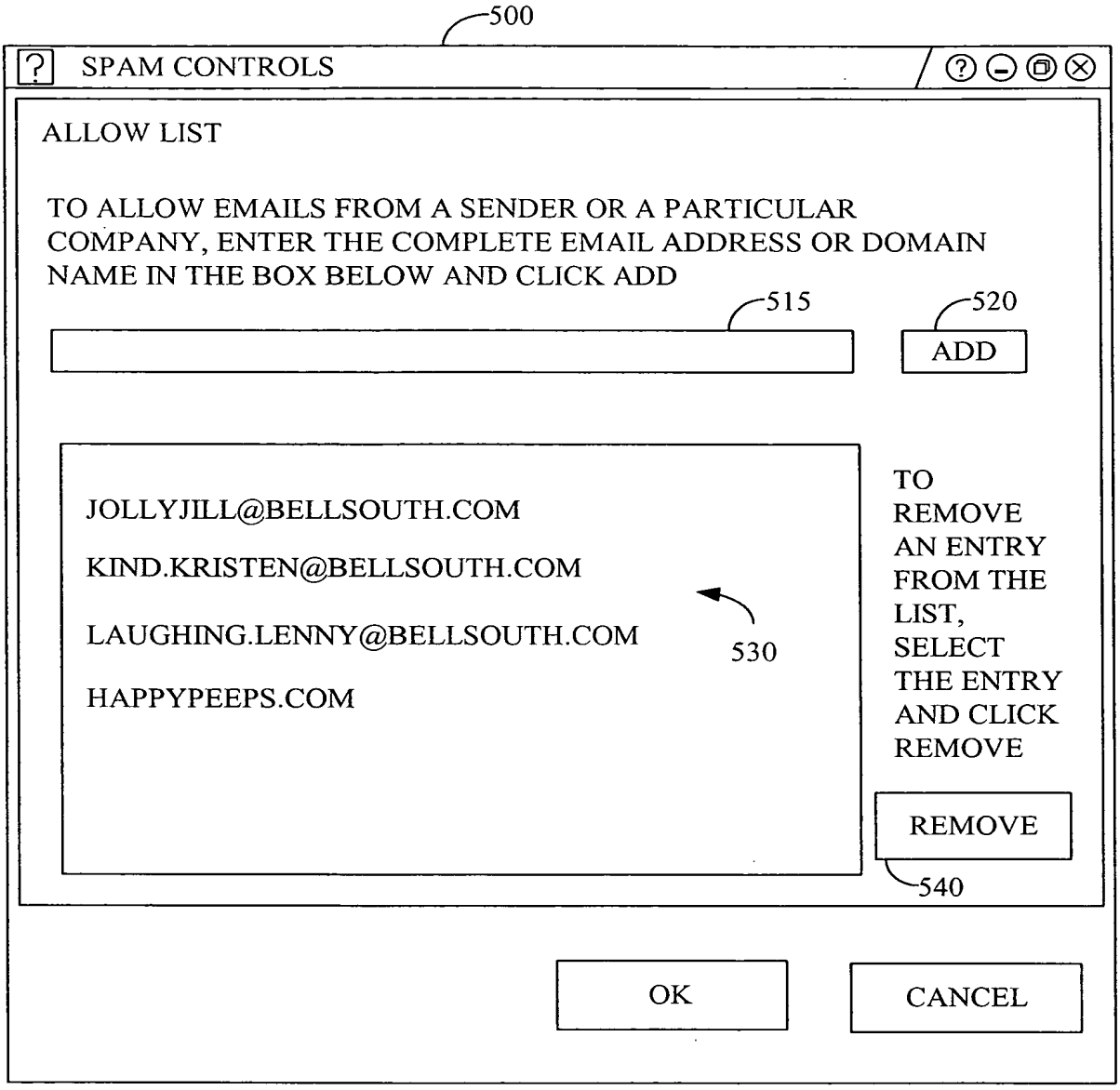
500
SPAM CONTROLS
ALLOW LIST
TO ALLOW EMAILS FROM A SENDER OR A PARTICULAR COMPANY, ENTER THE COMPLETE EMAIL ADDRESS OR DOMAIN NAME IN THE BOX BELOW AND CLICK ADD
515
520
ADD
JOLLYJILL@BELLSOUTH.COM
KIND.KRISTEN@BELLSOUTH.COM
LAUGHING.LENNY@BELLSOUTH.COM
HAPPYPEEPS.COM
530
TO REMOVE AN ENTRY FROM THE LIST, SELECT THE ENTRY AND CLICK REMOVE
REMOVE
540
OK
CANCEL

FIG. 5

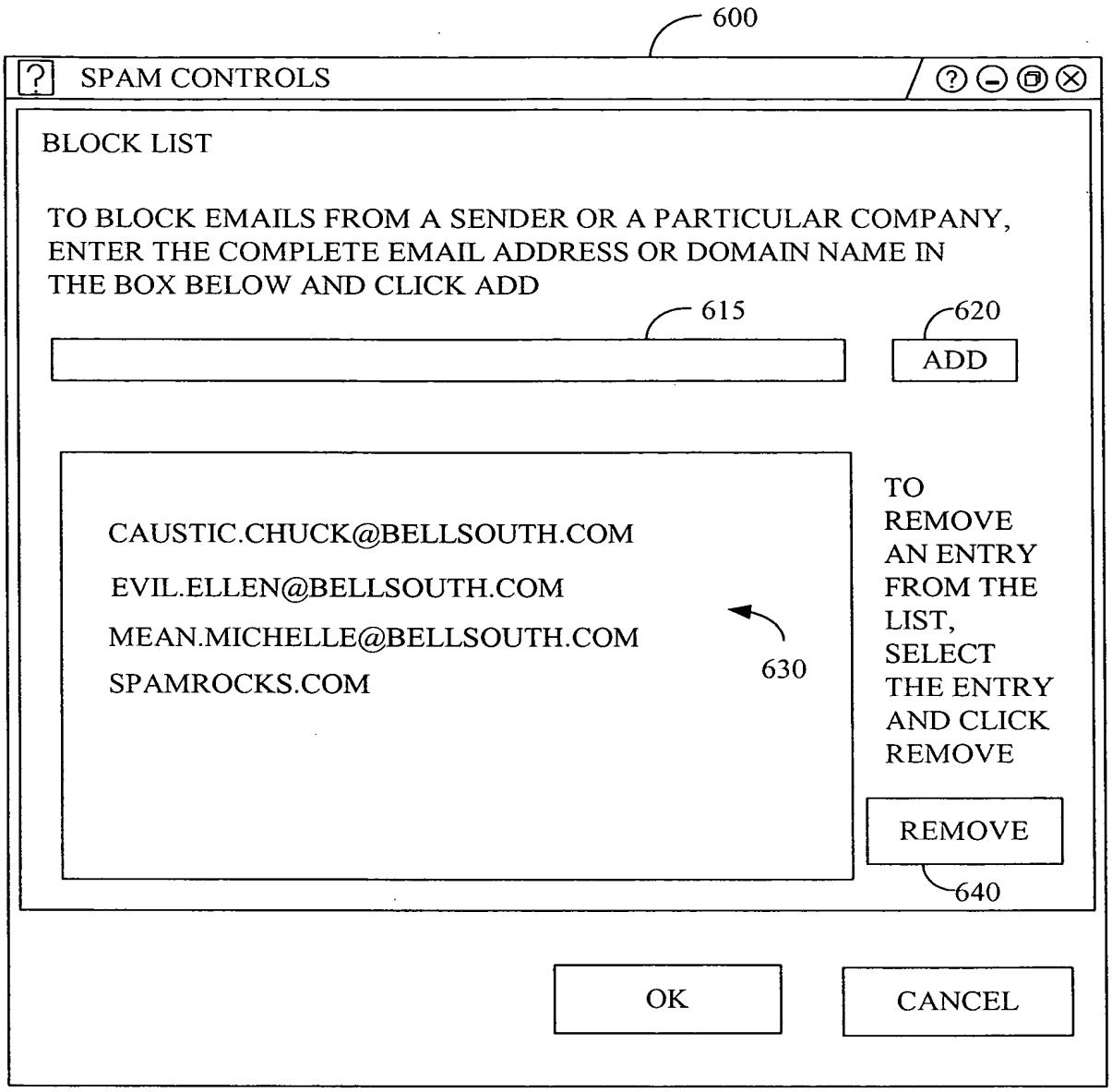
600
SPAM CONTROLS
BLOCK LIST
TO BLOCK EMAILS FROM A SENDER OR A PARTICULAR COMPANY, ENTER THE COMPLETE EMAIL ADDRESS OR DOMAIN NAME IN THE BOX BELOW AND CLICK ADD
615
620
ADD
CAUSTIC.CHUCK@BELLSOUTH.COM
EVIL.ELLEN@BELLSOUTH.COM
MEAN.MICHELLE@BELLSOUTH.COM
SPAMROCKS.COM
630
TO REMOVE AN ENTRY FROM THE LIST, SELECT THE ENTRY AND CLICK REMOVE
REMOVE
640
OK
CANCEL

FIG. 6

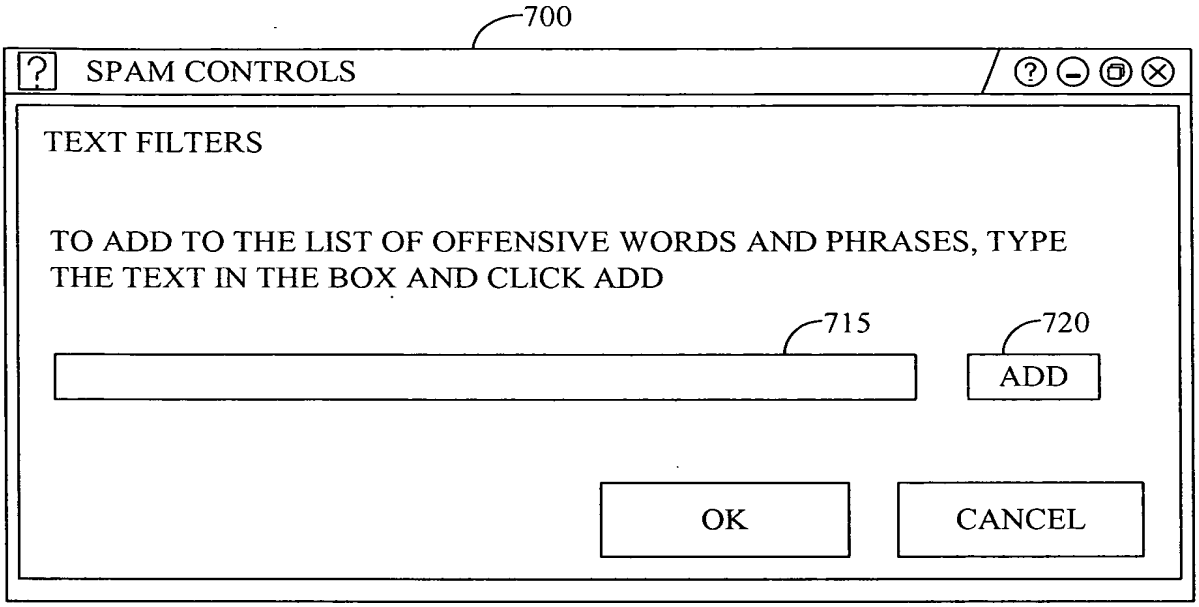
700
SPAM CONTROLS
TEXT FILTERS
TO ADD TO THE LIST OF OFFENSIVE WORDS AND PHRASES, TYPE THE TEXT IN THE BOX AND CLICK ADD
715
720
ADD
OK
CANCEL

FIG. 7

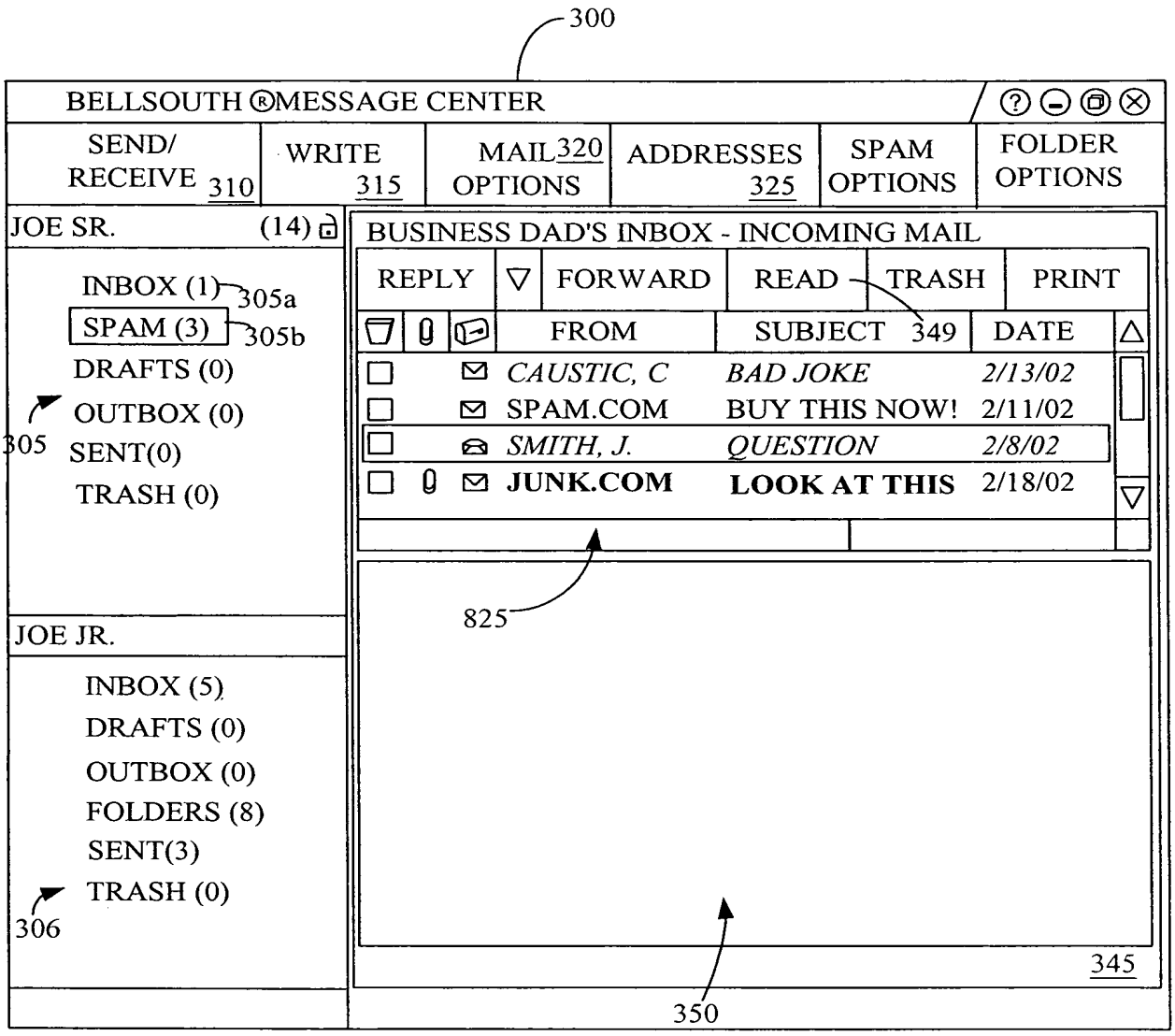
300
BELLSOUTH ®MESSAGE CENTER
SEND/ RECEIVE 310
WRITE 315
MAIL OPTIONS 320
ADDRESSES 325
SPAM OPTIONS
FOLDER OPTIONS
JOE SR. (14)
INBOX (1) 305a
SPAM (3) 305b
DRAFTS (0)
OUTBOX (0)
SENT(0)
TRASH (0)
305
JOE JR.
INBOX (5)
DRAFTS (0)
OUTBOX (0)
FOLDERS (8)
SENT(3)
TRASH (0)
306
BUSINESS DAD'S INBOX - INCOMING MAIL
REPLY
FORWARD
READ
TRASH
PRINT
FROM
SUBJECT 349
DATE
CAUSTIC, C BAD JOKE 2/13/02
SPAM.COM BUY THIS NOW! 2/11/02
SMITH, J. QUESTION 2/8/02
JUNK.COM LOOK AT THIS 2/18/02
825
345
350

FIG. 8

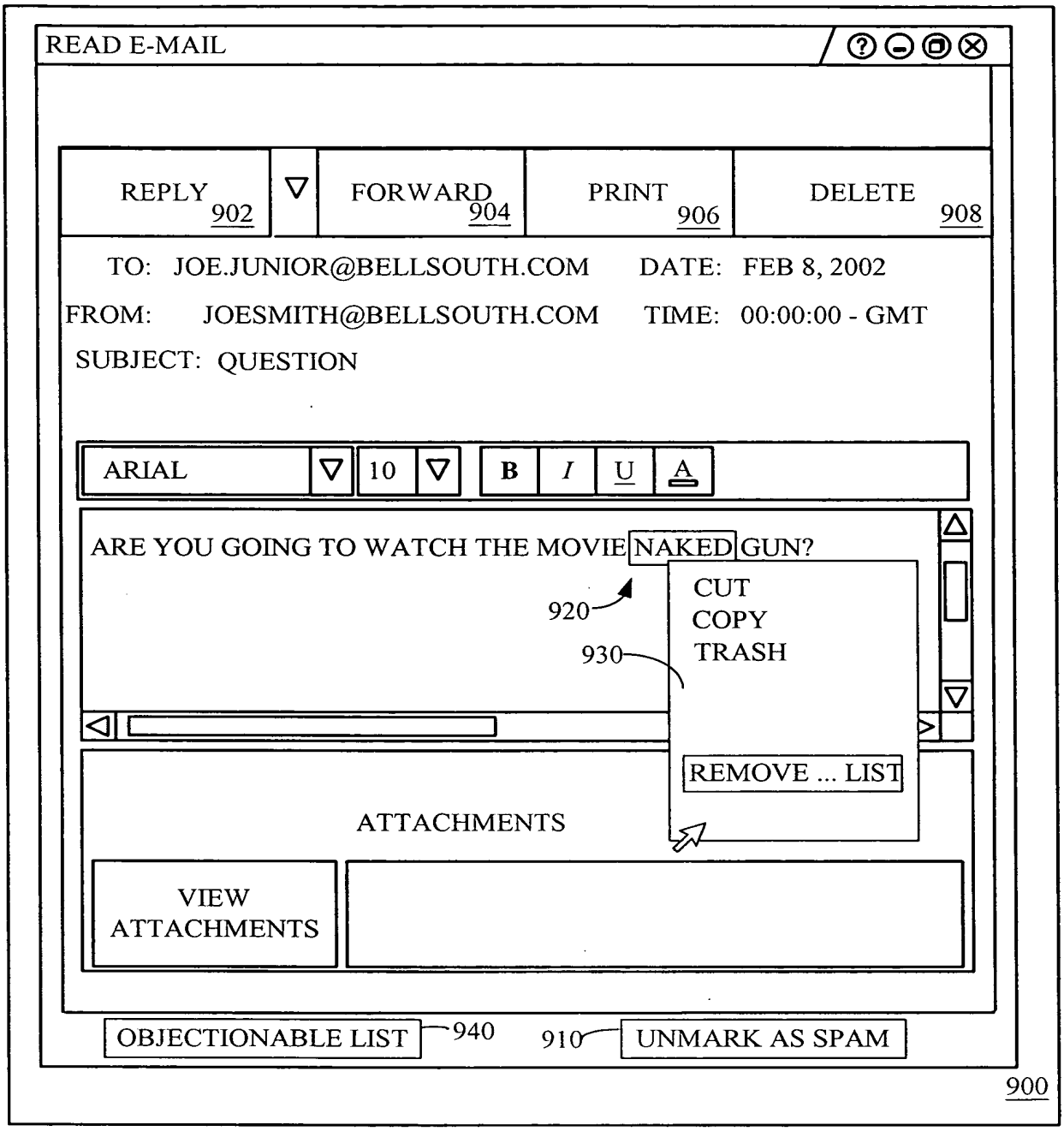
READ E-MAIL
REPLY 902
FORWARD 904
PRINT 906
DELETE 908
TO: JOE.JUNIOR@BELLSOUTH.COM
DATE: FEB 8, 2002
FROM: JOESMITH@BELLSOUTH.COM
TIME: 00:00:00 - GMT
SUBJECT: QUESTION
ARIAL
10
B
I
U
A
ARE YOU GOING TO WATCH THE MOVIE NAKED GUN?
920
930
CUT
COPY
TRASH
REMOVE ... LIST
ATTACHMENTS
VIEW ATTACHMENTS
OBJECTIONABLE LIST
940
910
UNMARK AS SPAM
900

FIG. 9A

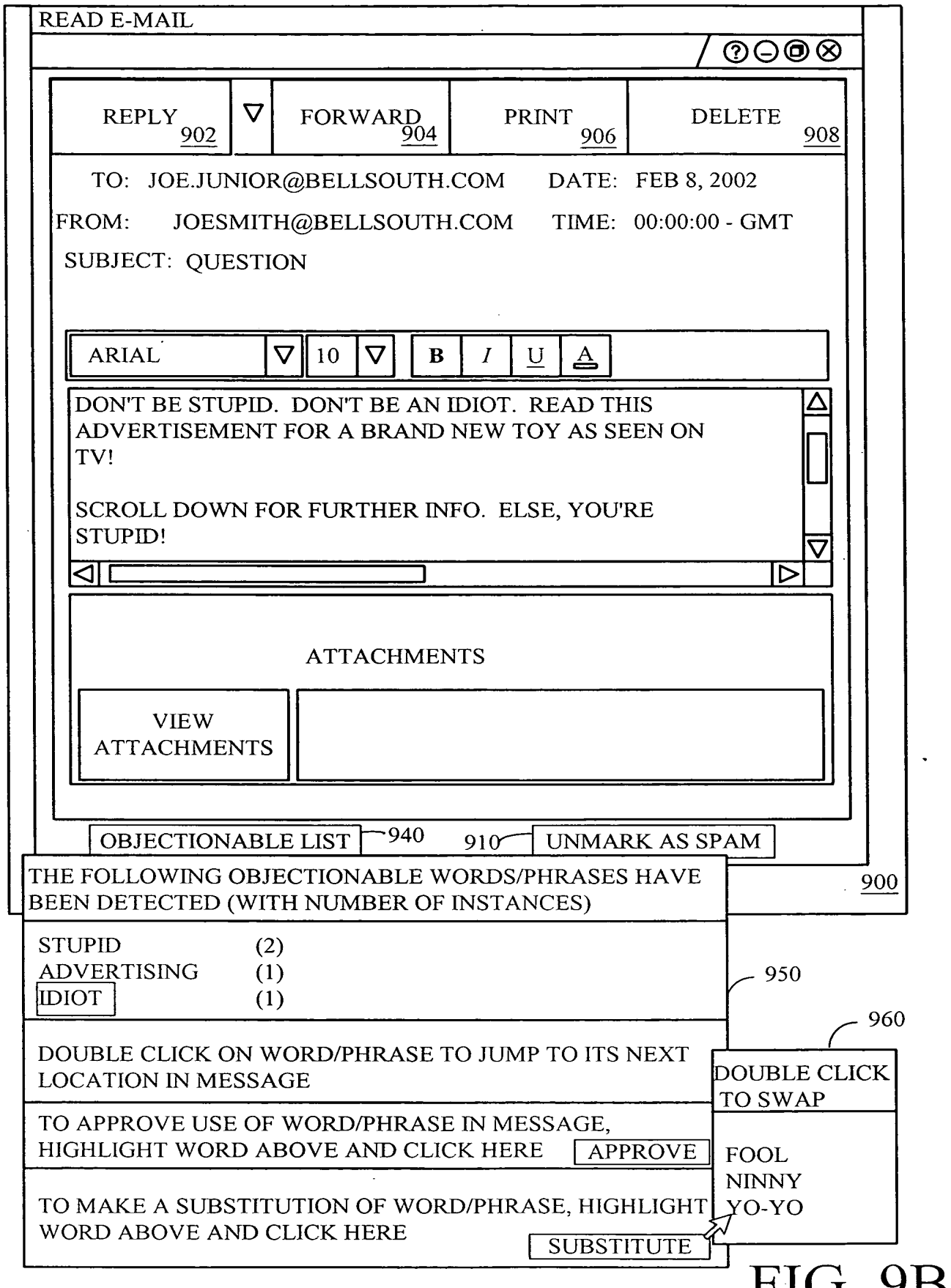
READ E-MAIL
REPLY 902
FORWARD 904
PRINT 906
DELETE 908
TO: JOE.JUNIOR@BELLSOUTH.COM DATE: FEB 8, 2002
FROM: JOESMITH@BELLSOUTH.COM TIME: 00:00:00 - GMT
SUBJECT: QUESTION
ARIAL
10
B
I
U
DON'T BE STUPID. DON'T BE AN IDIOT. READ THIS ADVERTISEMENT FOR A BRAND NEW TOY AS SEEN ON TV!
SCROLL DOWN FOR FURTHER INFO. ELSE, YOU'RE STUPID!
ATTACHMENTS
VIEW ATTACHMENTS
OBJECTIONABLE LIST
940
910
UNMARK AS SPAM
900
THE FOLLOWING OBJECTIONABLE WORDS/PHRASES HAVE BEEN DETECTED (WITH NUMBER OF INSTANCES)
STUPID (2)
ADVERTISING (1)
IDIOT (1)
950
960
DOUBLE CLICK TO SWAP
FOOL
NINNY
YO-YO
DOUBLE CLICK ON WORD/PHRASE TO JUMP TO ITS NEXT LOCATION IN MESSAGE
TO APPROVE USE OF WORD/PHRASE IN MESSAGE, HIGHLIGHT WORD ABOVE AND CLICK HERE
APPROVE
TO MAKE A SUBSTITUTION OF WORD/PHRASE, HIGHLIGHT WORD ABOVE AND CLICK HERE
SUBSTITUTE

FIG. 9B

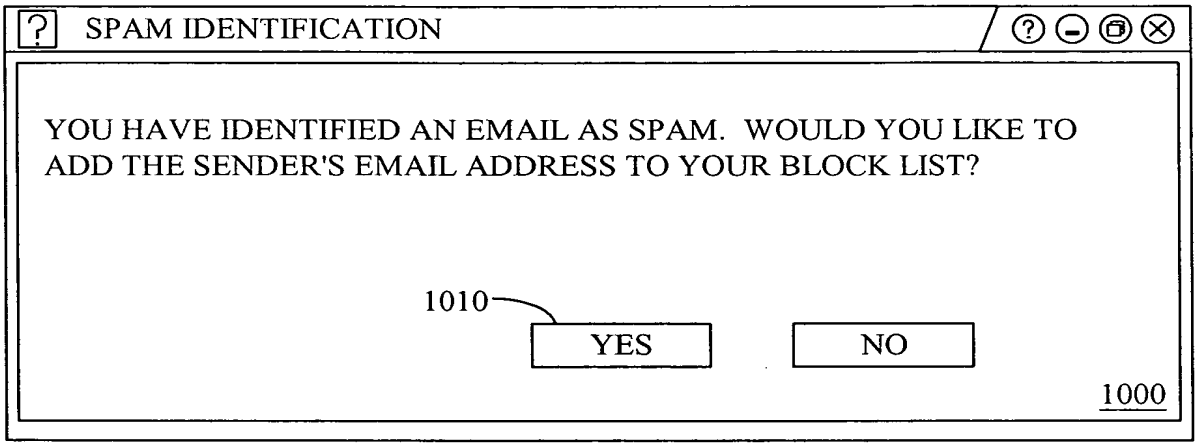
SPAM IDENTIFICATION
YOU HAVE IDENTIFIED AN EMAIL AS SPAM. WOULD YOU LIKE TO ADD THE SENDER'S EMAIL ADDRESS TO YOUR BLOCK LIST?
1010
YES
NO
1000

FIG. 10

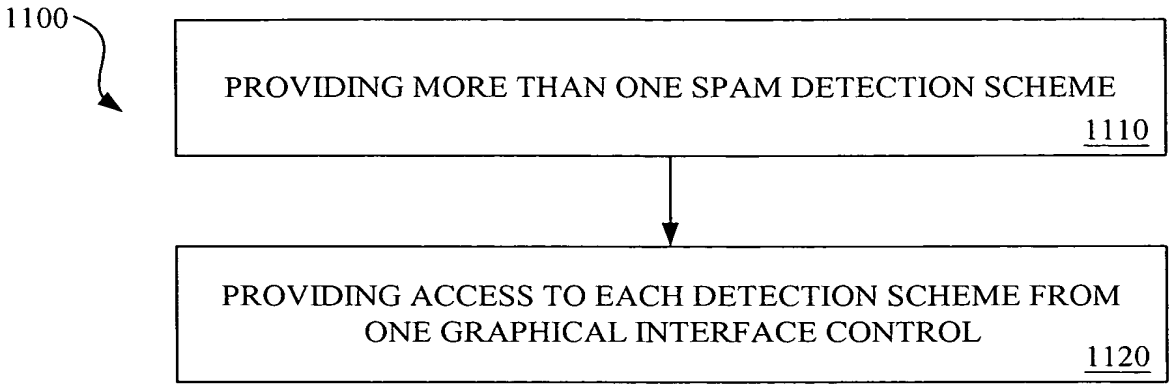
1100
PROVIDING MORE THAN ONE SPAM DETECTION SCHEME
1110
PROVIDING ACCESS TO EACH DETECTION SCHEME FROM ONE GRAPHICAL INTERFACE CONTROL
1120

FIG. 11

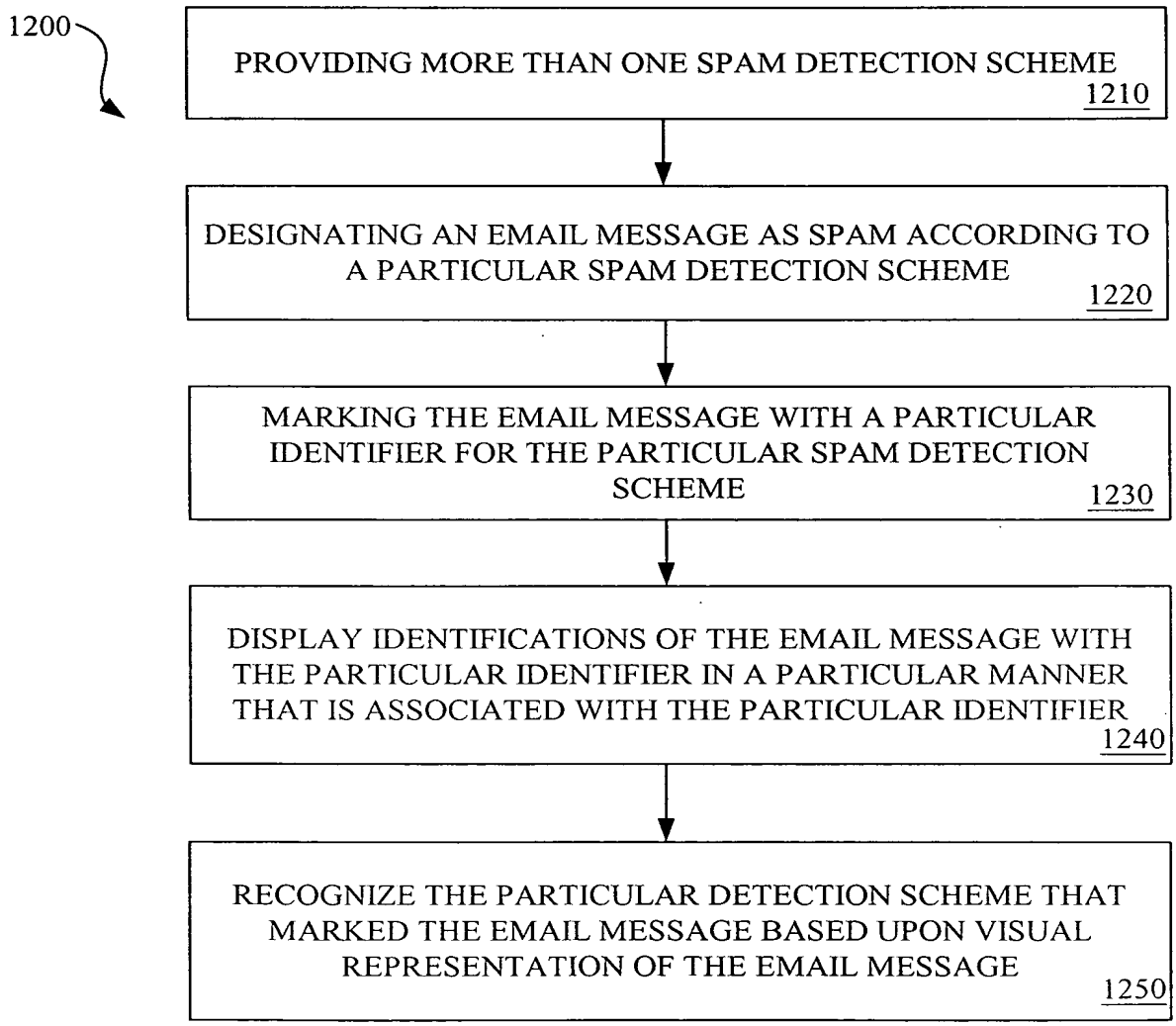
1200
PROVIDING MORE THAN ONE SPAM DETECTION SCHEME
1210
DESIGNATING AN EMAIL MESSAGE AS SPAM ACCORDING TO A PARTICULAR SPAM DETECTION SCHEME
1220
MARKING THE EMAIL MESSAGE WITH A PARTICULAR IDENTIFIER FOR THE PARTICULAR SPAM DETECTION SCHEME
1230
DISPLAY IDENTIFICATIONS OF THE EMAIL MESSAGE WITH THE PARTICULAR IDENTIFIER IN A PARTICULAR MANNER THAT IS ASSOCIATED WITH THE PARTICULAR IDENTIFIER
1240
RECOGNIZE THE PARTICULAR DETECTION SCHEME THAT MARKED THE EMAIL MESSAGE BASED UPON VISUAL REPRESENTATION OF THE EMAIL MESSAGE
1250

FIG. 12

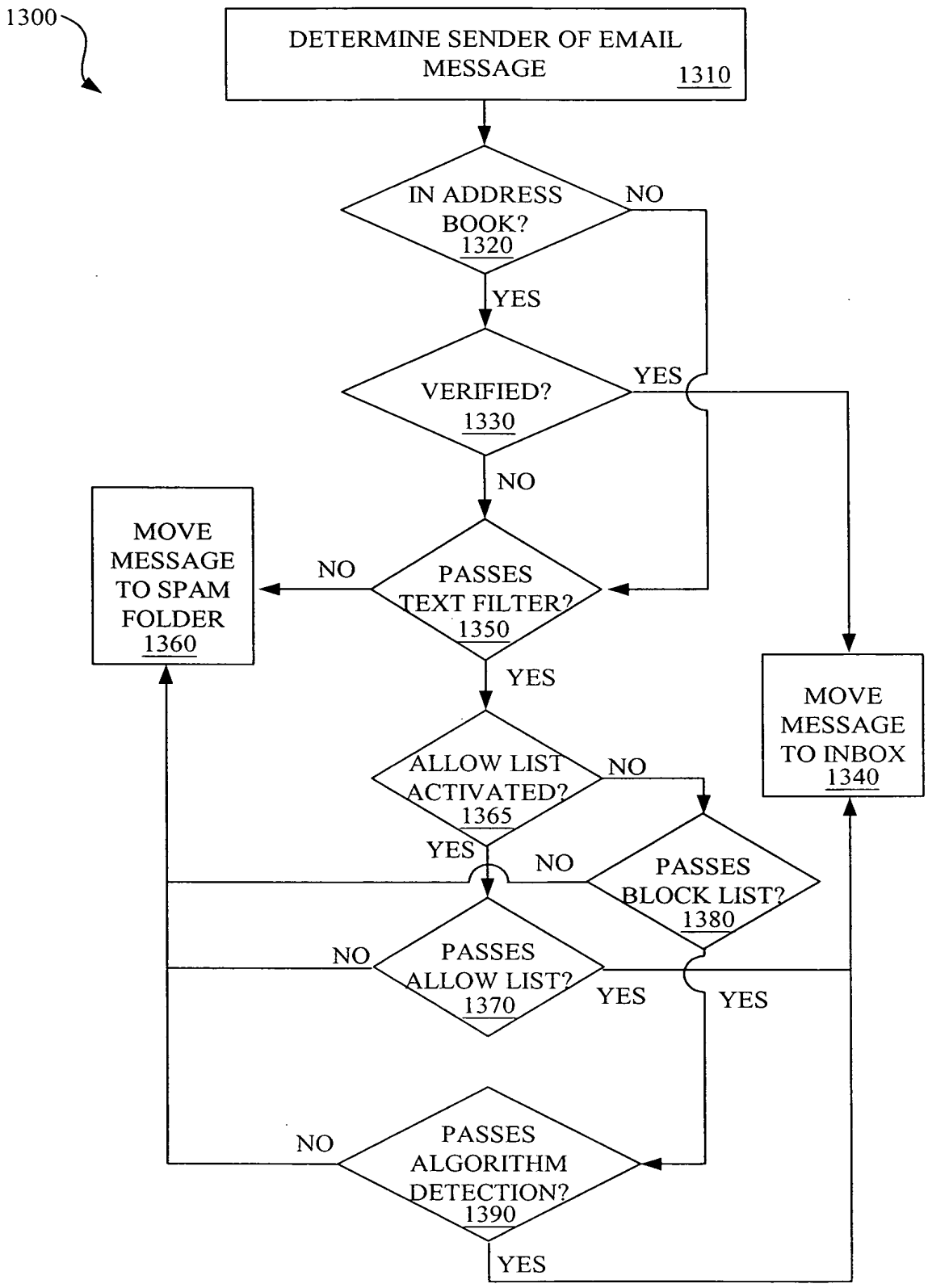
1300
DETERMINE SENDER OF EMAIL MESSAGE 1310
IN ADDRESS BOOK? 1320
NO
YES
VERIFIED? 1330
YES
NO
MOVE MESSAGE TO SPAM FOLDER 1360
NO
PASSES TEXT FILTER? 1350
YES
MOVE MESSAGE TO INBOX 1340
ALLOW LIST ACTIVATED? 1365
NO
YES
NO
PASSES BLOCK LIST? 1380
NO
PASSES ALLOW LIST? 1370
YES
YES
NO
PASSES ALGORITHM DETECTION? 1390
YES

FIG. 13